We offer the following comment for the Publication: 935210 DR07-42107,dated 04/13/2015

Page 7 ,item 3,4
(3) Worst case results should be reported for occupied bandwidth comparison and intermodulation tests done with and without any AGC circuitry activated, for devices so equipped.
(4) Devices using automatic gain control (AGC) as a means for complying with service rule power limits should provide test results showing maximum output with and without AGC activated. Rated power listed on grant should not exceed the applicable service rule limit (see, e.g., V j 1).

Comment: "Should" does not indicate it's a requirement
Suggestion: replace "Should" with "Shall".

Page 9 User's manual requirement ,item 7
7) High level summary and/or description of safeguard features (if operational description is confidential)
Comment: This is confusing as if the requirement is to include detail in the operational description in the user's manual.

Suggestion: replace with "brief description of safeguard feature such as the booster contains Anti Oscillation, AGC, Noise Power limiting circuit compliant with NPS requirement"

Page 11(f) item 2,3,4
(2) Warning message for use of unauthorized antennas, cables, and/or coupling devices
(3) Provide a complete list of authorized antennas, cables, and/or coupling devices
(4) List default antenna, cable, and/or coupling device that are shipped with the booster

Comment: item 2,3,4 seems to indicated the booster is to be sold with authorized antenna. However it is industry practice that industrial boosters are not sold with antenna nor cable, in addition, there is NO antenna kitting per FCC booster rule for Industrial Boosters.

Suggestion: remove 3,4 and replace 2 with warning message for use of antenna /cables and /or coupling device that may result in non-compliant ERP.

Page 13 (i) item 4,5,6
(3) Warning message for use of unauthorized antennas, cables, and/or coupling devices
(4) Provide a complete list of authorized antennas, cables, and/or coupling devices
(5) List default antenna, cable, and/or coupling device that are shipped with the booster

Comment : item 4,5,6 seems to indicated the booster is to be sold with authorized antenna. However it is industry practice that industrial boosters are not sold with antenna nor cable, in addition, there is NO antenna kitting per FCC booster rule for Industrial Boosters.

Suggestion: remove 4,5 and replace 3 with warning message for use of antenna /cables and /or coupling device that may result in non-compliant ERP.

Page 22 2/ remote unit C
c) separate FCC ID from ***remote***, unless electrically identical

Comment: Remote appears incorrect with relationship with preceding Host unit

Suggestion: replace *remote* with *host*

Numbering error:

Page 47,

f) All modes of operation must be verified to maintain operation within authorized limits at the maximum uplink and downlink test levels per device type as defined in 5.4, by increasing the power level in 2 dB steps from the AGC level to the maximum input level specified in 5.4.
Page 48,
i) Repeat step h) while increasing the signal generator amplitude in 2 dB steps until the maximum input level indicated in 5.4 is reached. If the booster has shut down at any point during the input power steps it should be noted and step h) shall be repeated at an input level 1 dB less than that found to cause the shutdown.
Page 49
n) Increase the signal generator amplitude in 2 dB steps to 10 dB above the AGC threshold determined in 7.4i), but to not to exceed the maximum input level in 5.4, to affirm that the EUT maintains compliance with the intermodulation limit.
Page 51
l) Increase the signal generator amplitude in 2 dB steps until the maximum input level indicated in 5.4 is reached. Affirm that the EUT maintains compliance with the OOBE limits.

Comment: 5.4 is incorrect
Suggestion: replace with 5.5

Page 52 , p53
h) Connect the EUT to the test equipment as shown in **Figure 4** for uplink and **Figure 5** for downlink. Affirm the coupled path of the RF coupler is connected to the spectrum analyzer.
m) Repeat 7.7.1h) through 7.7.1l) for all operational uplink and downlink bands.

Comment: The new rule removed variable downlink transmit noise requirement

Suggestion: remove "**Figure 5** for downlink", "and downlink bands."

Ref page 32
§ 20.21(e)(8)(i)(A)(1) UL ~~and DL~~ ports transmitted noise power [dBm/MHz]: PTN ≤ −(103+RSSI).

Page 53 Variable uplink noise timing is to be measured as follows.
f) Repeat 7.7.2a) to 7.7.2e) for all operational uplink and downlink bands.

Comment : Downlink is not required

Suggestion: remove and downlink bands.

Page 53
Figure 5
Comment, Figure 5 is for **Test setup for downlink noise power measurement in the presence of a downlink signal,** which has been removed from requirement.

Suggestion: remove figure 5 AND don't forget to revise subsequent figures and references.

Page 57
NOTE — Consumer boosters certified as direct connection mobile boosters having less than or equal to 15 dB are exempt from compliance to testing procedures in sections 7.11.2 and 7.11.3.

Comment : It is unclear what is having less than or equal to 15 dB

Suggestion: add "gain of " ie having system gain of less than or equal to 15 dB

Page 77
d) Ability to generate non-pulsed and pulsed CW tones and band-limited AWGN.

Comment : there is no requirement in the test method in 3.0 requiring the use of PULSE CW nor Pulsed GSM signal.

Suggestion: remove non-pulsed and pulsed.

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n) Compare the spectral plot of the input signal (determined from step m), to the output signal (determined from step l) to affirm that they are similar and provide in test report.

Comment: Similar is NOT defined

Suggestion: The OET should define a limit to compare the input and output signal ,since -26dB BW is measured

Page 80, 81

3.5.5 Calculating the mean amplifier, booster, or repeater gain

After the mean input and output power levels have been measured as described above, the mean gain of the EUT can be determined from:
Gain (dB) = output power (dBm) − input power (dBm).
Report the mean gain for each authorized operating frequency band and each test signal stimulus.

Comment: The FCC rule does not impose a gain limit similar to other regulatory agency, measuring and reporting gain is unnecessary.

Suggestion: remove section 3.5.5 or state it is optional (understanding the maybe there is a desire to keep the KDB inline with established procedure)

Page84, 85

4.4 EUT input-versus-output signal comparison

Comment : this procedure is missing additional test above AGC level as required.

Suggestion: insert "Repeat the procedure for both test signals with the input signal amplitude set 3 dB above the AGC threshold." After step n

n) Compare the spectral plot of the output signal (determined in step k), to the input signal (determined in step l) to affirm they are similar.
o) Repeat the procedure for both test signals with the input signal amplitude set 3 dB above the AGC threshold."
P) Repeat steps b) to o) for all authorized operational bands and emissions types (see applicable regulatory specifications, e.g., §90.210).

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4.5.5 Calculating the amplifier, booster, or repeater gain

After the input and output power levels have been measured as described above, the gain of the EUT can be determined from:
Gain (dB) = output power (dBm) − input power (dBm).
Report the gain for each authorized operating frequency band and each test signal stimulus.

Comment: The FCC rule does not impose a gain limit similar to other regulatory agency, measuring and reporting gain is unnecessary.

Suggestion: remove section 4.5.5 or state it is optional (understanding the maybe there is a desire to keep the KDB inline with established procedure)

Page 87

4.7.2**out-of-band/block emissions conducted measurement**

Comment : this procedure is missing additional test above AGC level as required.

Suggestion: insert " Repeat the procedure with the composite input power level set to 3 dB above the AGC threshold. " after step h

h) Capture the plot for inclusion in the test report.
i) Repeat the procedure with the composite input power level set to 3 dB above the AGC threshold.
j) Repeat steps b) to i) for all operational bands.

Reference page 7

(3) Worst case results should be reported for occupied bandwidth comparison and intermodulation tests done with and without any AGC circuitry activated, for devices so equipped.